

**ABSTRACT**

A method of modulating immune response in an animal is disclosed. Such a method

- 5 interacting the immature dendritic cells from the animal with an antigen *ex vivo* so that the immature dendritic cells present the antigen on their surfaces, inducing maturation of the immature dendritic cells *ex vivo*, and contacting the mature dendritic cells *ex vivo* with a modulator comprising TRANCE, conservative variants thereof, fragments thereof, analogs or derivatives thereof, or a fusion protein comprising the amino acid
- 10 sequence of TRANCE, conservative variants thereof, or fragments thereof. After contacting the modulator *ex vivo*, the mature dendritic cells are introduced into the animal. As a result, immune response in the animal towards the antigen is modulated relative to the immune response against the antigen in an animal in which dendritic cells did not interact with the antigen *ex vivo*, and did not contact a modulator *ex vivo*.
- 15 Preferably, the method of the present invention results in increasing immune response towards the antigen in the animal.